



STATE OF WASHINGTON

## STATE BUILDING CODE COUNCIL

### 2021 Washington State Energy Code Development Energy Code Proposal Short Form

For editorial **Coordination, Clarifications & Corrections** only,  
without substantive energy or cost impacts

Log No. **209**  
TAG Revision 6/25/21

Code being amended: ☒ **Commercial** Provisions ☐ **Residential** Provisions  
(A MS Word version of the code is linked to the name)

Code Section # **C403.10.1.1, C403.10.2**

Brief Description:

**This proposal incorporates corrections to the duct insulation requirements. Updates are from the Seattle Energy Code and from industry professionals who have reported that code language within these sections is unclear.**

Proposed code change text: (Copy the existing text from the Integrated Draft, linked above, and then use underline for new text and ~~strikeout~~ for text to be deleted.)

#### **C403.10.1 Duct and plenum insulation and sealing.**

**C403.10.1.1 Ducts, shafts and plenums conveying outdoor air.** ~~Ducts, Shafts and plenums conveying outdoor air from the exterior of the building to the mechanical system shall meet all air leakage and building envelope insulation requirements of Section C402, plus building envelope vapor control requirements from the International Building Code. Shaft and plenum surfaces conveying outdoor air from the exterior of the building shall not be included as part of the building envelope shall not be used in the calculation of maximum glazing area as described in Section C402.4.1.~~

**Exception:** Unheated equipment rooms with combustion air louvers, provided they are isolated from conditioned space at sides, top and bottom of the room with R-11 nominal insulation.

~~extending Ductwork Ducts~~ conveying outdoor air shall be insulated continuously from the building exterior to an automatic shutoff damper or heating or cooling equipment. ~~For the purposes of building envelope insulation requirements, Duct surfaces shall be insulated with the minimum insulation values in Table C403.10.1.1. Duct surfaces included as part of the building envelope shall not be used in the calculation of maximum glazing area as described in Section C402.4.1.~~

**Exceptions:** Outdoor air ducts serving individual supply air units with less than 2,800 cfm of total supply air capacity, provided these are insulated to the minimum insulation values in Table C403.10.1.1.

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- ~~1. Unheated equipment rooms with combustion air louvers, provided they are isolated from conditioned space at sides, top and bottom of the room with R-11 nominal insulation.~~

**C403.10.2 Duct construction.** Ductwork shall be constructed and erected in accordance with the International Mechanical Code. For the purposes of this section, longitudinal seams are joints oriented in the direction of airflow. Transverse joints are connections of two duct sections oriented perpendicular to airflow. Duct wall penetrations are

openings made by any screw, fastener, pipe, rod or wire. All other connections are considered transverse joints, including but not limited to spin-ins, taps and other branch connections, access door frames and jambs, and duct connections to equipment.

Purpose of code change:

**Revise language to clarify code intent. These changes are not intended to alter existing code stringency.**

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